Dear Claude,

I am writing to express my keen interest in joining CNRS@CREATE for a postdoctoral position, and ultimately, I aspire to contribute as an assistant professor. Having spent significant years abroad, advancing the frontiers of particle physics at institutions like CERN and the University of Alberta, my motivation to return to Singapore is twofold: a deep-rooted passion for research and a personal desire to be closer to my family.

## **Background and Achievements:**

My academic journey began at Nanyang Technological University (NTU), where I graduated with First Class Honors in Physics with a second major in Pure Mathematics. My subsequent endeavours at the University of Alberta for my Master's and Ph.D. have been marked by consistent academic excellence and notable contributions to the MoEDAL experiment at CERN. My work, ranging from the implementation of machine learning techniques for particle characterization to leading searches for highly ionising particles, has been recognized and published in esteemed journals such as Nature and Physical Review Letters.

## **Connection to Singapore:**

Singapore, being my homeland, holds a special place in my heart and resonates deeply with me. Beyond the personal ties, I am inspired by the rapid advancements in research and technology in Singapore. I am eager to bring my international experience to contribute to the academic and research community here. My undergraduate years at NTU have instilled in me a deep appreciation for the quality of education and research in Singapore, and I am enthusiastic about the prospect of giving back to the community that laid the foundation for my academic journey.

## **Future Aspirations:**

My vision is to bridge the knowledge I've garnered in particle physics with emerging fields, potentially exploring the intersections of machine learning and physics in urban contexts, as hinted at in our earlier discussion about urban wind fluid dynamics. I believe that CNRS@CREATE, with its reputation for fostering interdisciplinary research, would be the ideal environment for such endeavours. Furthermore, as an academic, I am passionate about mentoring the next generation of scientists, sharing insights from my experiences, and fostering a culture of curiosity and innovation.

In conclusion, I am excited about the possibility of joining CNRS@CREATE and contributing to its esteemed legacy. I am confident that my background, combined with my motivation to be in Singapore, aligns well with the vision of the institution. I look forward to the opportunity to discuss how I can contribute to the academic and research endeavours at CNRS@CREATE.

Many thanks,

Ameir Shaa